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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,894	03/23/2004	Larry S. Eoff	2001-IP-005267U1P2	2392
7590 01/03/2007 Robert A. Kent Halliburton Energy Services 2600 South 2nd Street Duncan, OK 73536-0440			EXAMINER FIGUEROA, JOHN J	
			ART UNIT	PAPER NUMBER
			1712	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/03/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/806,894

Applicant(s)

EOFF ET AL.

Examiner

John J. Figueroa

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 11-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The double patenting rejection in item 12 on page 7 of the Office Action of July 3, 2006, hereinafter 'OA', has been withdrawn in view of the arguments in Applicant's amendment/response of September 29, 2006, hereinafter 'Response'.
2. The double patenting rejections in items 13-15 on pages 7-9 of OA have been withdrawn in view of the terminal disclaimer filed with Response.
3. The 35 U.S.C. §102 rejection of claims 1-6 and 8-10 as anticipated by PCT Application Publication Number WO 03/056130 A1 to Couillet et al., hereinafter 'Couillet', is maintained for the same reasons previously set forth in item 17 on page 9 of OA.

### ***Election/Restrictions***

4. Claims 7 and 11-38 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim, in accordance with the Restriction Requirement in item 1 of OA. Because Applicant did not provide substantive arguments traversing the restriction requirement in Response, the restriction is thus made FINAL.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent claim 1 has been amended to recite an additional step of "allowing the water-soluble relative permeability modifier to interact with at least a portion of the subterranean formation thereby reducing the permeability of *at least a portion of that portion* of the subterranean formation to aqueous-based fluids." There is no written description support for this limitation in the instant specification.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Couillet for the same reasons previously made of record in item 17 on page 9 of OA.

Applicant has noted on page 8 of Response that Couillet is not prior art under 35 U.S.C. 102(b). Instead, it is prior art under 35 U.S.C. 102(a) and 102(e). Examiner regrets this typographical error. However, because the grounds of rejection are identical and Applicant has addressed these grounds of rejection in items B and C on pages 9 and 10 of Response, no new issue has been raised by the proper identification of the subsection of 35 U.S.C. §102 upon which this rejection actually falls under.

Examiner further notes that the method of use of independent claim 1 has been amended to add an additional new step regarding "allowing the water-soluble relative permeability modifier to interact with at least a portion of the subterranean formation thereby reducing the permeability of at least a of that portion to aqueous-based fluids."

Couillet was discussed previously in item 17 on page 9 of OA and all the arguments and grounds of rejection therein are incorporated herein in their entirety.

Although Couillet may not explicitly disclose the reduction of the permeability of "at least a portion of the subterranean formation", because Couillet discloses treating a formation with the same relative permeability modifier (RPM) polymer compound as encompassed by the instant claims and thus possesses the same physical properties/effects, then Couillet is inherently disclosing reducing the permeability of "at least a portion of the subterranean formation" upon the addition of the disclosed RPM polymer compound in the Couillet's method of treating/fracturing a formation.

Thus, the claims, as amended, remain unpatentable over Couillet.

### ***Response to Arguments***

#### ***The Double Patenting Rejections (items 12-15 of OA)***

9. Applicant's arguments filed in Response with respect to the double patenting rejection in item 12 of OA have been fully considered and are persuasive. This double patenting rejection has been withdrawn.

10. Applicant has filed a terminal disclaimer over United States Patent Numbers 10/612,271; 10/780,995; and 10/825,001 in response to the nonstatutory obviousness-type double patenting rejections made of record in items 13-15 of OA. Accordingly, these double patenting rejections have been withdrawn.

#### ***The 35 U.S.C. §102 Rejection over Couillet (item 17 of OA)***

11. Applicant's arguments in Response with respect to the 35 U.S.C. 102(e) rejection of claims 1-6 and 8-10 as anticipated by Couillet have been fully considered but are deemed unpersuasive.

Applicant's arguments in Response regarding the newly added "allowing" step in independent claim 1 were addressed *supra* in paragraph #10. Because Couillet adds the same RPM polymer compound to a formation as encompassed by the method of the instant claims, then "at least a portion" of the permeability of the formation must inherently be reduced when the same RPM polymer compound as recited in the instant claims is "allowed" to interact with the formation as disclosed in Couillet.

Applicant's arguments concerning Couillet not disclosing every element of the claims with "sufficient specificity" is ambiguous and misdirectional. The sections of the MPEP cited in Response (MPEP §§2131.02 and 2131.03) are directed to Genus-Species (chemical structure) and numerical ranges. There are no numerical ranges in independent claim 1. Only claim 2 discloses a range, that is, a molecular weight range for the polymer "of from about 100,000 to about 10,000,000" that is anticipated by Couillet as discussed on page 9, lines 16-21 of OA.

The only "genus/species" issue in claim 1 would be whether the prior art discloses the recited RPM polymer compound. As previously shown in item 17 on pages 9 and 10 of OA, Couillet discloses chitin, chitosan and modified chitosan via acylation/alkylation with an alkyl halide as a polymer compound added to the formation. (See, instant claims 5 and 6 reciting chitosan and alkyl halide as the hydrophilic polymer and hydrophobic compound, respectively.) Consequently, Couillet is disclosing using in the method of treating a formation a RPM polymer compound as encompassed by the instant claims with "sufficient specificity".

Thus, the instant claims remain anticipated by Couillet.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. The examiner can normally be reached on Mon-Thurs & alt. Fri 8:00-5:30pm.

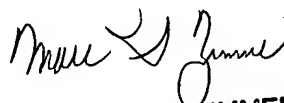
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 1712

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJF/RAG

  
MARC S. ZIMMER  
PRIMARY EXAMINER